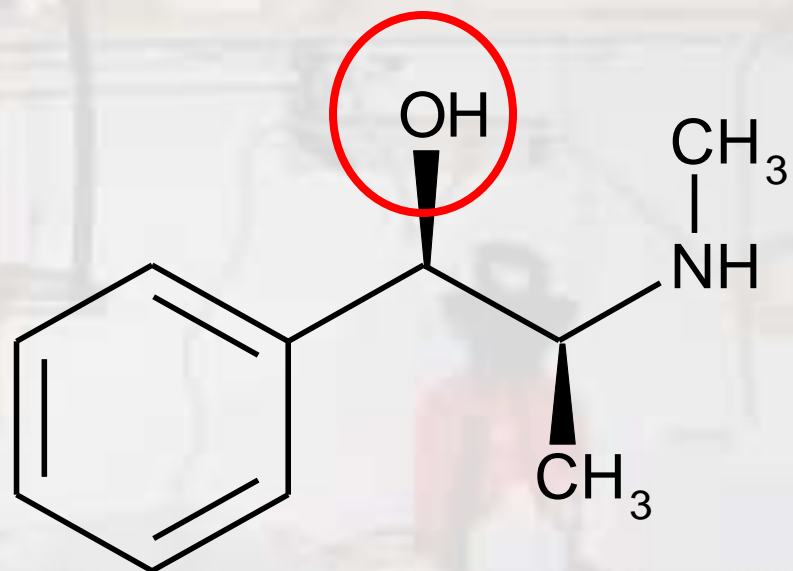
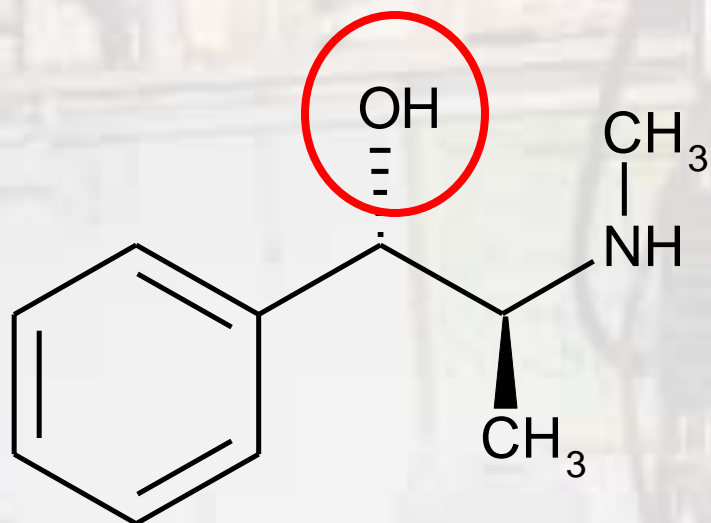


# Pharmacies and Clandestine Production of Methamphetamine in the Czech Republic

**Stanislav Havlíček**

Czech Chamber of Pharmacists





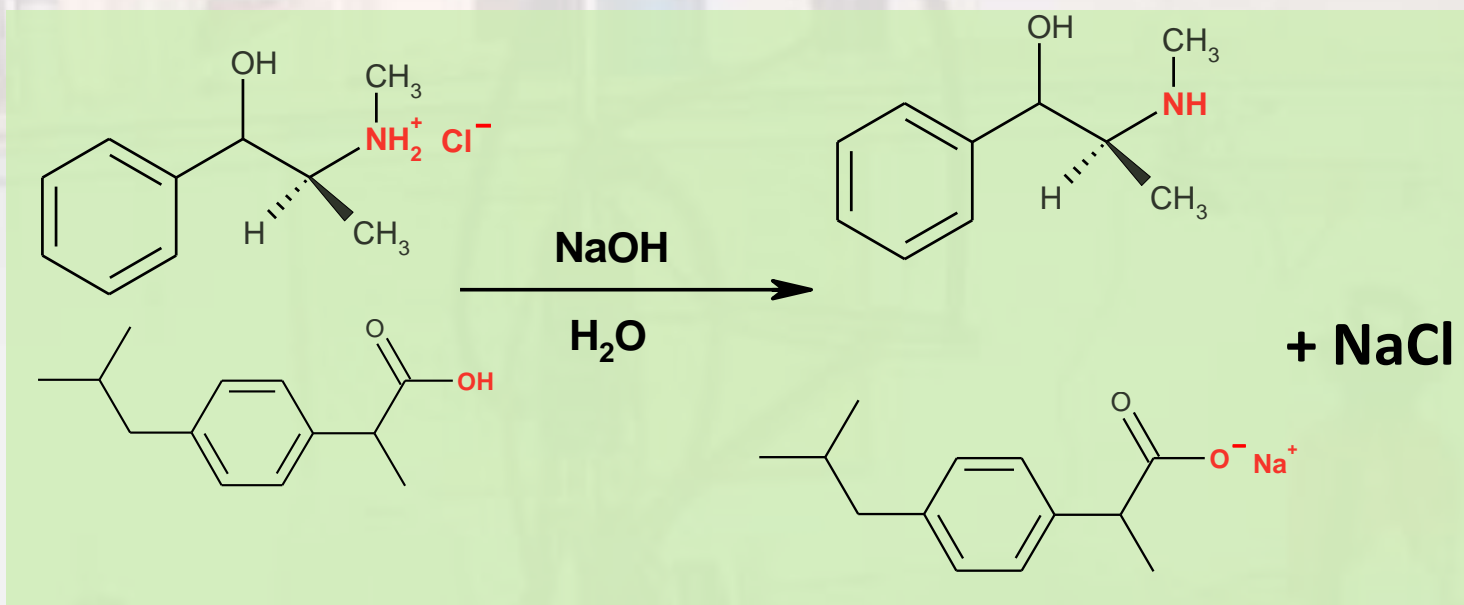
**EPHEDRINE X PSEUDOEPHEDRINE**

# OTC drugs with Pseudoephedrine (PSE)

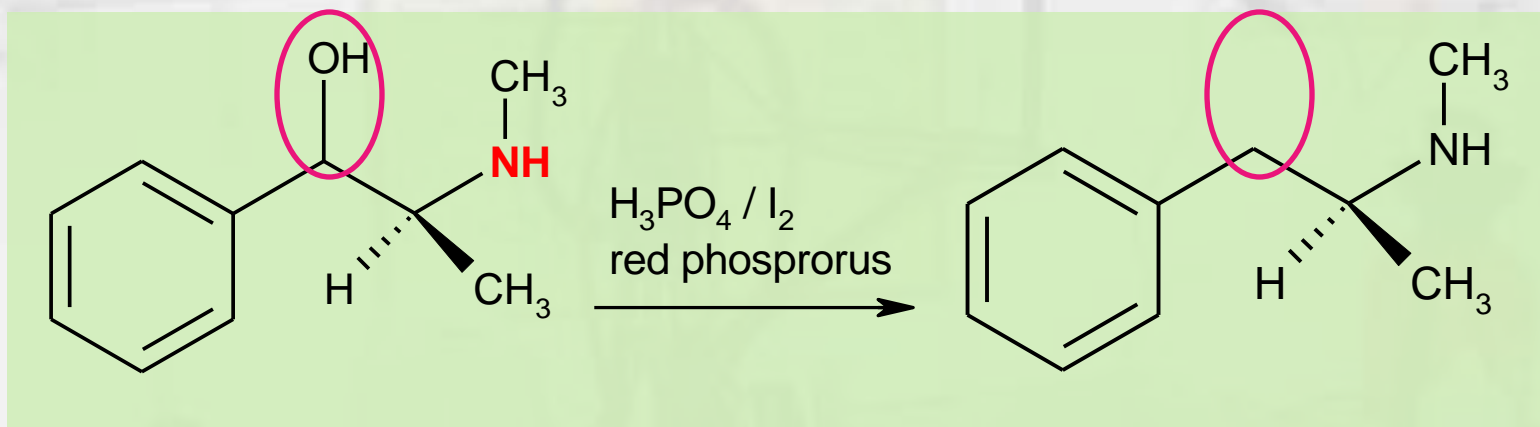


IBUPROFEN  
IBUPROFEN  
???



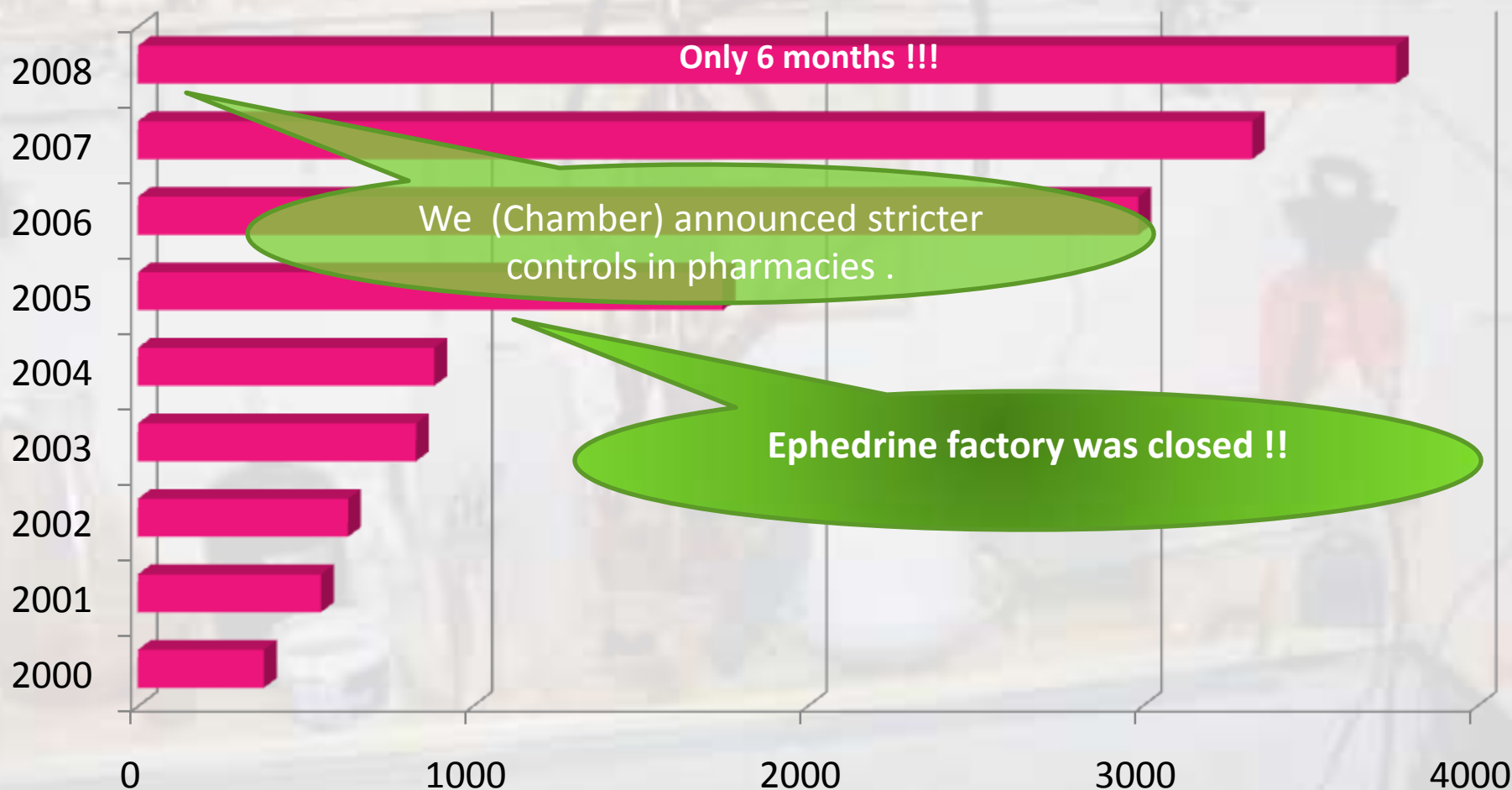


# ISOLATION OF PSEUDOEPHEDRINE



# REDUCTION

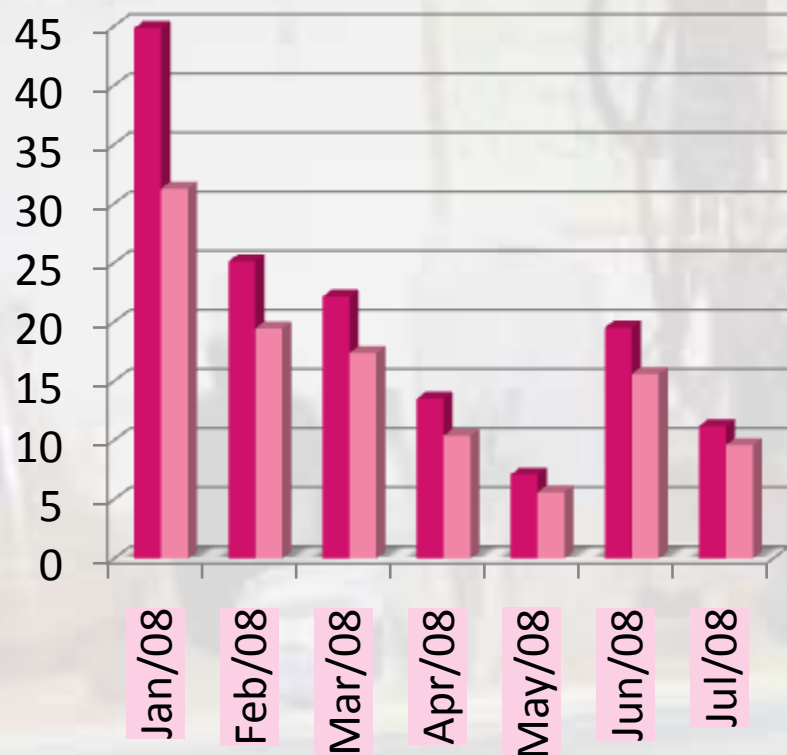
# Estimated sales in thousands pcg



# 24tabs/12tabs RATIO (thousands)

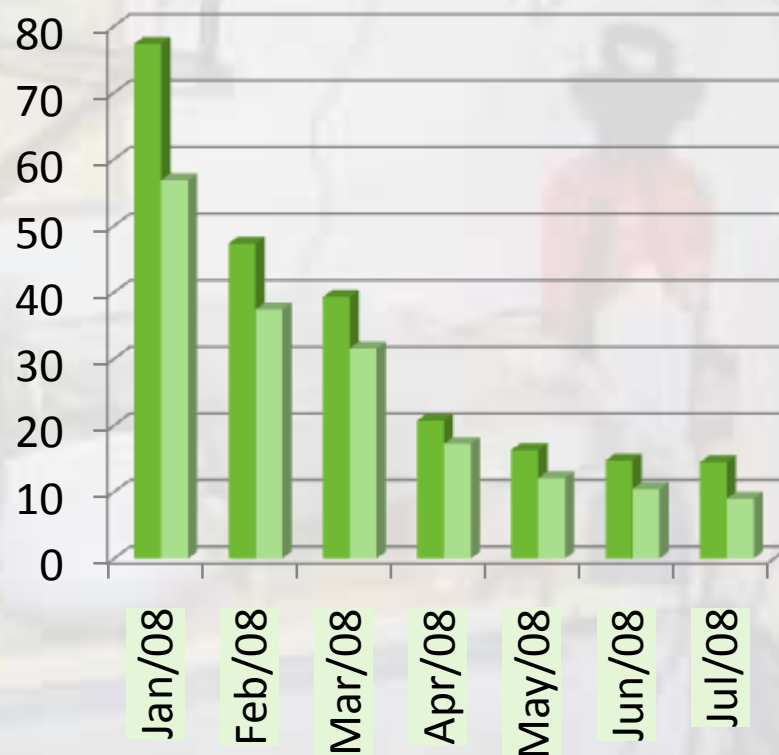
**Coldrex (no PSE)**

**1,3**



**Paralen PLUS**

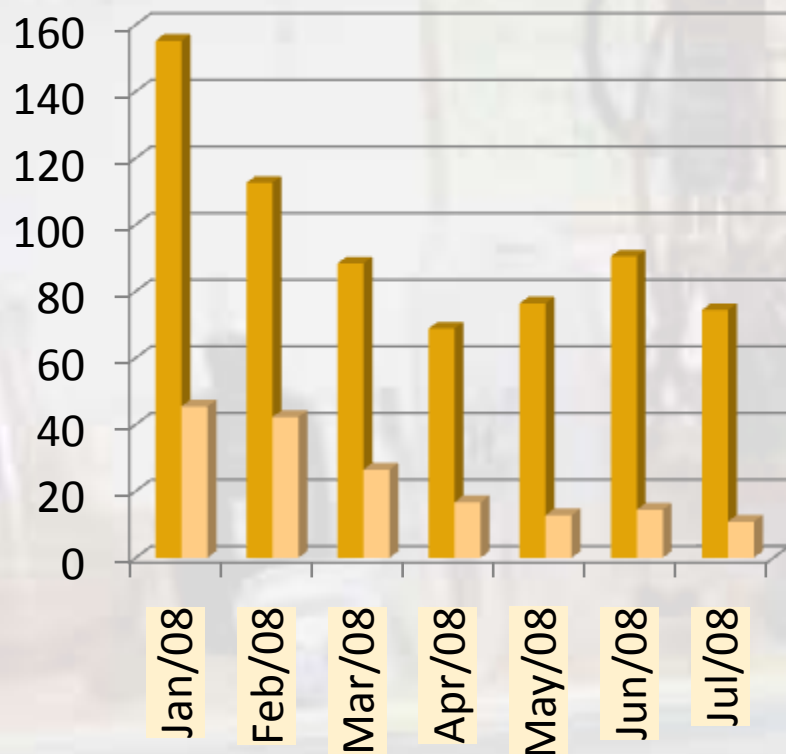
**1,3**



# 24tabs/12tabs RATIO (thousands)

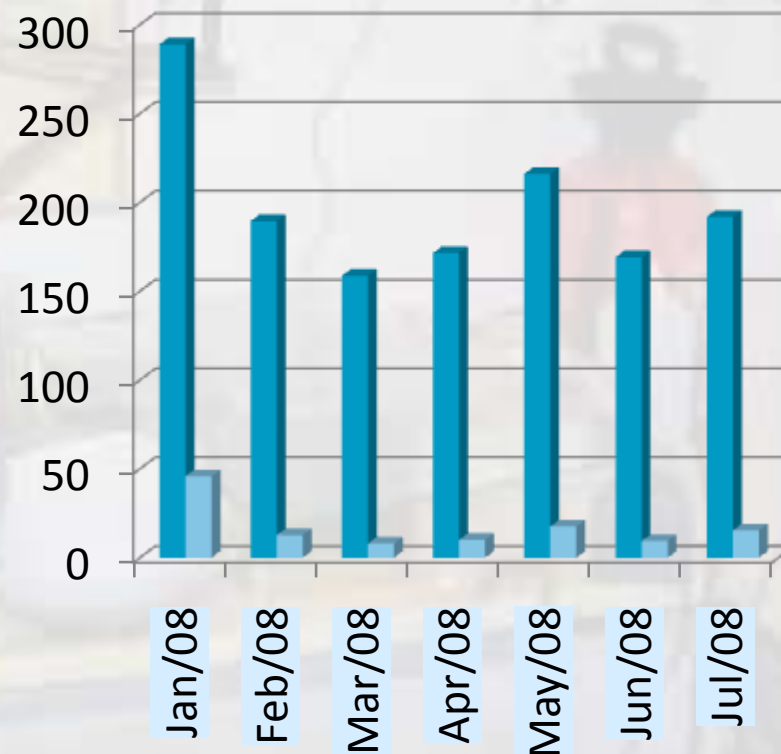
**Modafen**

**3,9**



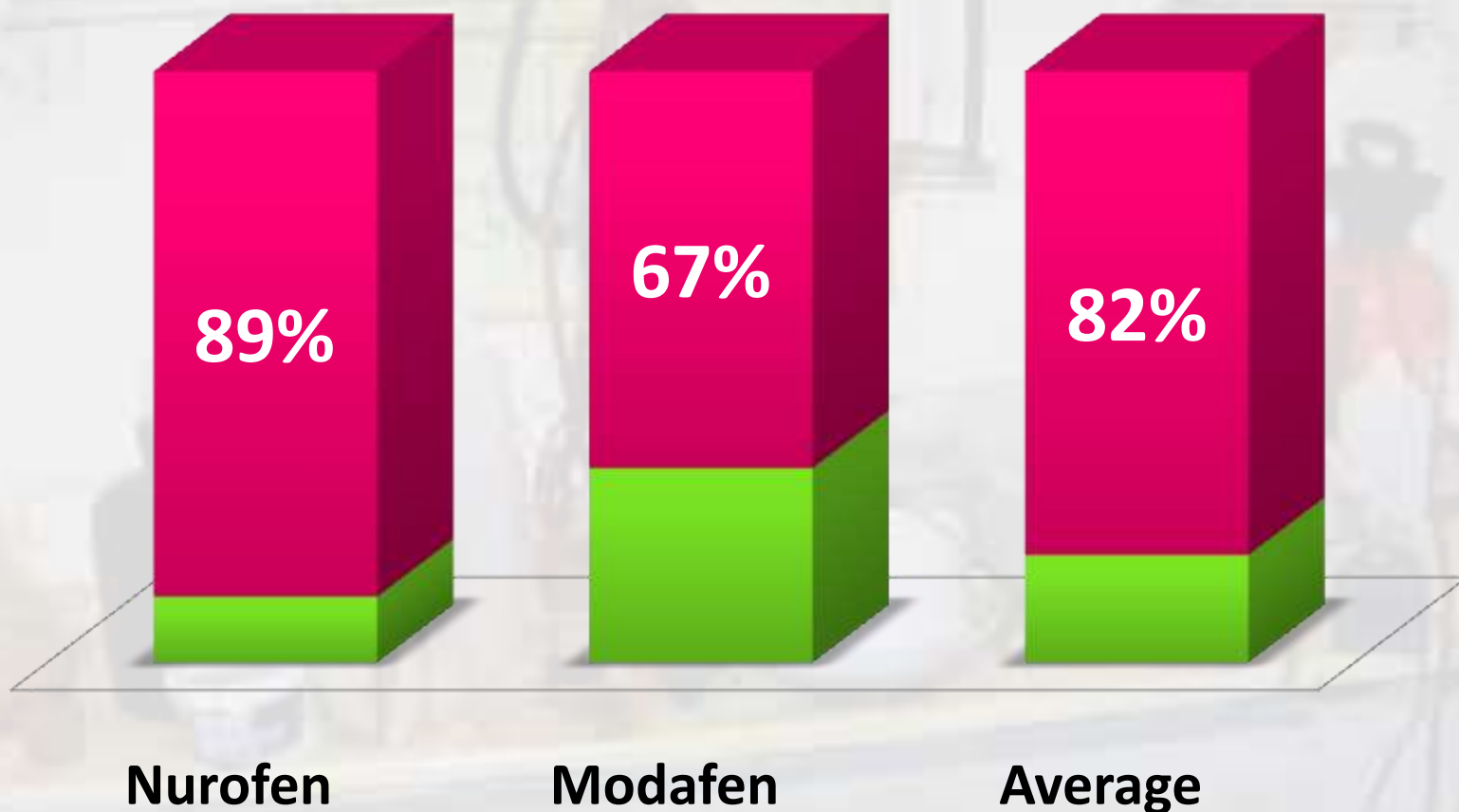
**Nurofen StopGrip**

**11,7**








## Estimate of Clandestine Production (by recalculating on 1,3 ratio)



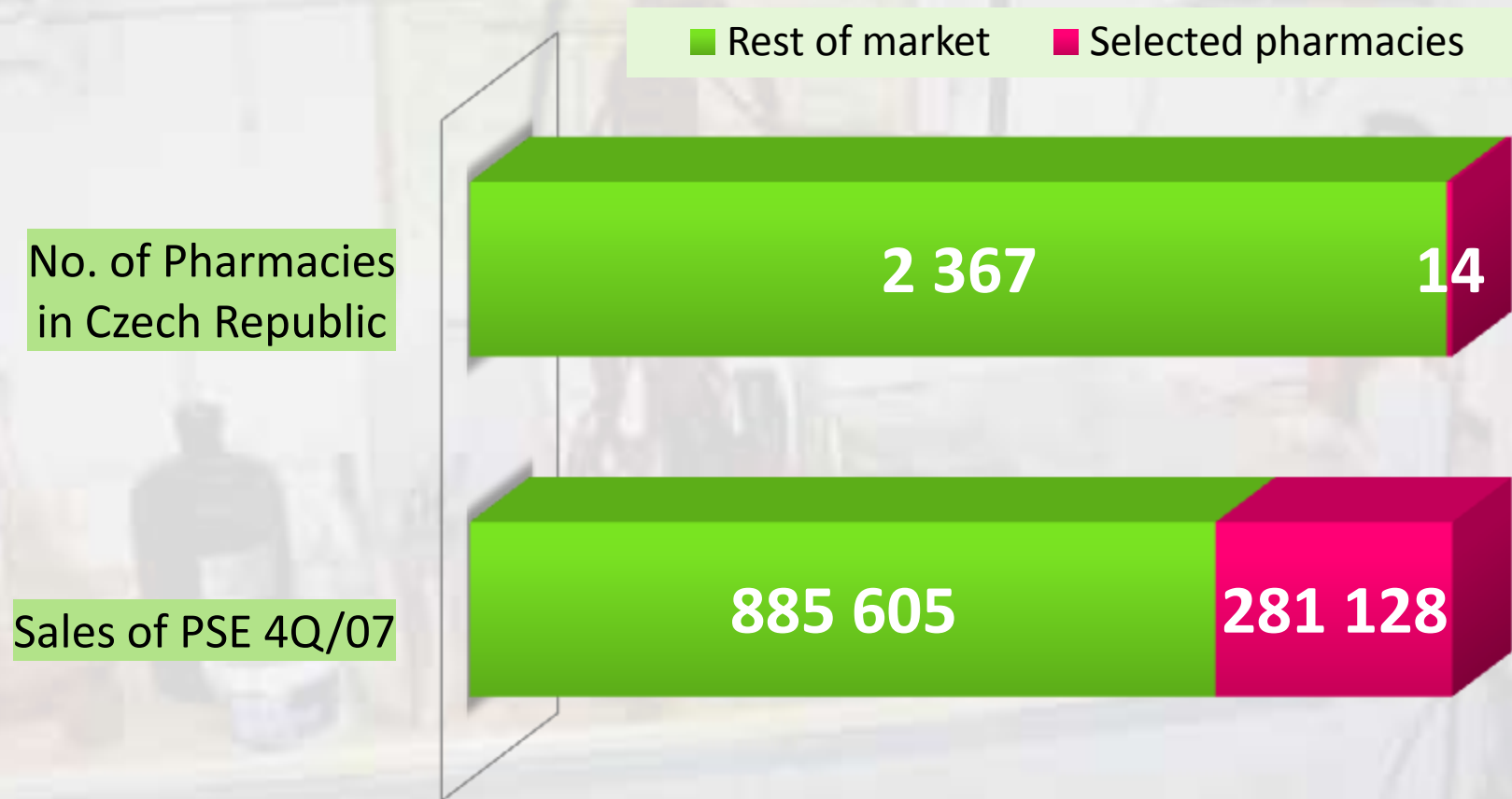


# THREE SMALL PHARMACIES, PRAGUE 4Q/2007

# Compared for example 4Q/07:

Open hours	8.00 – 18.00 (1 - 2 pharmacist) similar size		
Total sale (pcg)	135 099 (3,6/min) 	2316 (3,6/hour) 	178 (2,8/day) 
Nurofen STOPGRIP	94 691	1495	20
Modafen	30 538	789	28
NU/MO Ratio	3 : 1	2 : 1	1 : 1,4
Panadol PlusGrip	9 825	32	130
IBU/ PARA Ratio	13 : 1	72 : 1	1 : 2,7

# 0,6% Pharmacies sales 24,1% PSE 4Q/07



# Summary:

Medicine with **PSEUDOEPHEDRIN** is used for clandestine production of **METHAMPHETAMIN**

Combination with **IBUPROFEN** is more suitable than with **PARACETAMOL**  
– ratio 13 : 1

**Nurofen StopGrip** is used 3x more frequently than **Modafen** (contains surfactant)

82 % of 24tbl pcg of **PSEUDOEPHEDRIN+IBUPROFEN** medicine is going to clandestine production

**¼ of the whole sale comes from 14 pharmacies (6 ‰)**

# Thank you for your attention

